

Islands in the Stream Expedition
2001 Field Season
Dive Summary

Pulley Ridge
6/29/2001

Florida Middle Grounds/West Florida Shelf, Islands in the Stream

Overview of Dive A20-144 at Pulley Ridge

Sylvia Earle piloted this dive at the site known as Pulley Ridge on 6/29/2001 starting at 16:12:00. Total dive time was 4:57:00 and the maximum depth reached was 220 feet. (All times EST)

Dive Objectives. Objectives accomplished during the dive include:

Exploration/Recon	Primary
Fish Assessment	Primary
Benthic Assessment	Primary
Geologic Assessment	Primary
Filming	Primary
Education/Outreach	Primary
Site Characterization	Primary

Data Collected. Types of data collected during the dive include:

Digital Video Tapes	1
Digital Video Tapes	1
Digital Video Tapes	1
Digital Video Tapes	1
Digital Video Tapes	1
Tracking	

Living Marine Resources Abundance

few 2-10; many 11 - 100; abundant >100

Pelagic Fish	Few	Other Benthic	Abundant
Bottom Fish	Abundant		
Crustacean	Few		
Mollusk	Few		
Echinoderm	Many		

Observations and Comments on Living Marine Resources:

High benthic diversity. Agaricia the dominant hard coral cover, in places approaching 100% cover. One pale sea fan hosted about six swimming crinoids,

General Comments

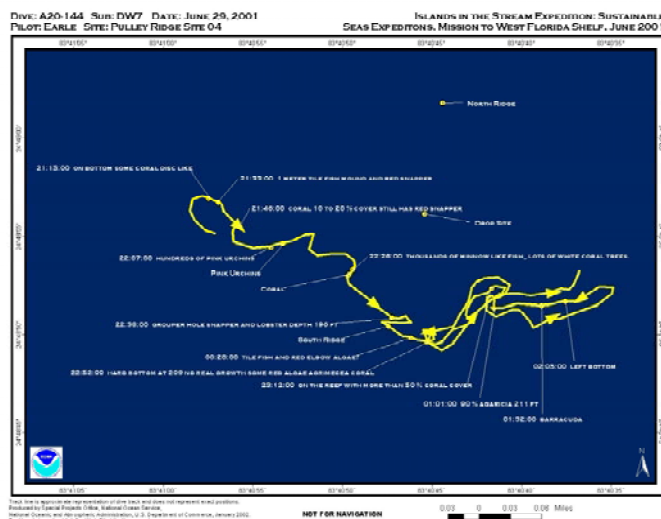
Pulley Ridge is a biologically and geologically significant area that merits further research and should be vigorously protected from disturbance.



Prepared by :
National Oceanic and Atmospheric Administration
6/29/2001

Dive Track Description

Five hours spent travelling over .5 miles of hard bottom along the top and edge of gradually sloping ridge, 197 - 220 ft depth. Nearly complete cover of algae (*Anadyomene menziesii*, *Dictyota*, coralline algal nodules and encrusting red algae, occasional hanks of filamentous bluegreens, possibly *Lyngbya majuscula*), sponges, soft corals and disc-shaped *Agaricia* hard coral with occasional mounds (about 50 encountered in 5 hours) of coralline algal rubble (about 1m wide, .5 - 1 m high) assembled by resident sand tilefish and occupied by numerous small fish. One large hollowed-out area occupied by 3 grouper (sp.?) and one Spanish hogfish, as well as numerous damselfish, cardinal fish, one spiny lobster, and one white-spined *Diadema* urchin. Slightly ridged base rock exposed in places, but mostly covered overall with light sediment and benthic animals and plants. Coral cover in places close to 100% (*Agaricia*). Some areas where coral had been broken and disturbed (by rays?) over areas several meters in diameter, short-spined pink *Lytechinus* urchins were abundant -- more than 100 at each of the several sites observed. Although the overall relief is low, the diversity and abundance of life is extraordinary. Among the fish observed were grouper (sp?), red snapper (20-30), 1 small barracuda, 1 amberjack, numerous chalk bass, 1 spotted goatfish, 5-6 French angelfish, 1 blue angelfish, 10 -12 reef butterfly fish, 1 longsnout butterfly fish, 6- 8 rock beauties, 2 cherubfish, 1 cero (?), an immense school of small fish -- thousands, possibly buga or bonnetmouth, like a flowing scarf close to the bottom about one hour into the dive; two brown chromis, 20 - 30 yellowtail reef fish, 5-6 squirrelfish, several rainbow wrasse(?), 1 queen triggerfish, 5-6 small reef sharks. No parrotfish, no surgeonfish. Relief of features observed during the dive ranged from to 1 meters.



Observed Human Activities

None Observed.

Observed Human Impacts

Garbage one beer can

Overall Dive Site Ratings

1 = low; 10 = high

Uniqueness	10
Health	10
Disturbance	1
Biodiversity	10

Observed Fish Abundance

few 2-10; many 11 - 100; abundant >100

Blue Angelfish	Single
Creolefish	Few
Greater Amberjack	Single
Other Angelfish	Few
Other Butterfly	Few
Other Damselfish	Many
Other Grouper	Few
Other Wrasses	Few
Red Snapper	Many
Reef Butterfly	Few
Spotfin Hogfish	Single
Tattler	Few
Yellowtail Reef fish	Few